# NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATION

# IRRIGATION WATER CONVEYANCE, STEEL (ON-THE-GROUND) PIPELINE (feet) CODE 430FF

## **GENERAL**

This specification covers the installation of steel pipelines for irrigation permanently installed on the ground. Construction shall be in accordance with plans and these specifications.

#### **INSTALLATION**

#### **Materials**

Materials shall be as specified on the plans. Elbows, tees, crosses, reducers, gate valves, check valves, air and vacuum release valves, pressure relief valves, and pressure regulators shall be of the size and type of material specified and/or shown on the plans.

# **Placement**

On-the-ground pipelines shall be installed as a permanent installation. Pipe shall be laid to the lines and grades as shown on the drawings and/or as staked in the field, and shall be placed so that it is protected from the hazards imposed by traffic crossings, farm operations, or other hazards. The ground shall be shaped so as to provide support needed. Where rock or objects which might damage the pipe coating are encountered, sand or soil shall be used as a base for the pipe.

Thrustblocks shall be constructed at the locations and to the dimensions as shown on the drawings and/or as staked in the field. Pipe at thrustblocks shall be embedded or attached rigidly with a hold-down strap.

## **TESTING**

Pipelines will be tested as follows after they are assembled and before they are put into operation.

The pipeline shall be filled with water, taking care to bleed air and prevent water hammer. When the line is full, all valves shall be closed and the line shall be brought up to full design working pressure. All joints shall then be carefully inspected for leakage and any visible leaks shall be repaired.

It shall be demonstrated by testing that all valves, vents surge chambers and other appurtenances function properly when the pipeline is operated at design capacity. Objectionable

surge, water hammer, unsteady delivery of water, damage to the pipeline, and detrimental discharge from control valves are evidence of malfunction.

# **SAFETY**

Landowners or operators, sponsoring organizations, and contractors are liable for damage to utilities and damage resulting from disruption of service caused by construction activities. The Natural Resources Conservation Service makes no representation on the existence or nonexistence of any utilities. Absence of utilities on plan drawings is not assurance that no utilities are present at the site.

It is the responsibility of the landowner or operator to determine if there are buried or overhead utilities in the vicinity of the proposed work. They should take proper procedures to insure that the utilities will not be jeopardized and that equipment operators and others will not be injured during construction operations.